To: Chair Cristol and the VRE Operations Board

From: Doug Allen

Date: April 12, 2019

Re: Fare Collection System Update

VRE fare media are sold through several channels using two primary systems: VRE Mobile by moovel and the Scheidt & Bachmann (S&B) ticketing system.

The S&B system was installed in 2002 and consists of platform ticket vending machines (TVMs) and vendor location ticket office machines (TOMs). This magnetic-strip, paper ticketing system currently accounts for about 70% of VRE’s fare revenue.

The S&B system has required several updates to both software and hardware over the years to keep it current. The most recent upgrade, which is currently underway, is to ensure EuroPay Mastercard Visa (EMV) compliance for chip-enabled credit cards. The new hardware (TVM doors, computers, printers, pin-pads, touchscreens, etc.) is onsite and ready for installation. Once the software is certified to be EMV compliant, all TVMs and TOMs will be upgraded, currently scheduled for late Q2 2019.

The original design/build contract with S&B is dated June 2000 and has been amended 25 times for ongoing system maintenance and upgrades. As technology has improved, the system has adapted to improve efficiency and security. Most recently, the system servers have been migrated to a cloud environment hosted by S&B. This important change shifts some of the data security compliance requirements to S&B.

In May 2019, VRE Staff will ask the Operations Board for authorization to execute a new contract with S&B to incorporate the current preventive and remedial maintenance...
support, system hosting, and a required upgrade to the back-end system. This will allow VRE to update the outdated Terms and Conditions and transition from the old design/build agreement to a new maintenance and support agreement.

VRE Mobile, launched in May 2015, currently accounts for about 30% of fare revenue. As the most cost-effective form of fare media sales, VRE continues to make efforts to increase mobile use. The next major change will be a migration from the original custom-built platform to a new standardized mobility platform. This will improve the passenger’s experience by adding trip planning tools across multiple modes that could include first/last mile solutions. This is the same platform recently deployed by MARC and MTA in their Charm Pass app, and currently under development for DASH in Alexandria. For VRE, this creates the potential for joint fare products and could open the door for a regional mobile ticketing app.

The upgraded S&B system and the migration to the moovel mobility platform for VRE Mobile will allow VRE to remain at the forefront of technology and continue to improve the passenger experience.